

WHAT IS CLAIMED IS:

1                   1.     A method for managing a plurality of failures in a video and data  
2 network comprising:  
3                   discovering a failure in the video and data network;  
4                   correlating the failure with the plurality of failures to determine related  
5 failures;  
6                   isolating a root cause of the failure;  
7                   suppressing the related failures that were generated as a result of the root  
8 cause failure;  
9                   determining if the root cause is automatically resolvable; and  
10                  if the root cause is automatically resolvable, resolving the root cause.

11                  2.     The method of claim 1, wherein the video and data network comprises  
12 a Digital Subscriber Line (xDSL) network.

13                  3.     The method of claim 1, wherein the video and data network comprises  
14 a Very high bit rate DSL (VDSL) network.

15                  4.     The method of claim 1, further comprising creating a repair ticket for  
16 the failure.

17                  5.     The method of claim 1, wherein correlating the failure comprises:  
18 interacting with a physical network transport inventory; and  
19 determining upstream and downstream physical network elements from the  
20 failure.

21                  6.     The method of claim 5, wherein correlating the failure comprises:  
22 interacting with a virtual network transport inventory; and  
23 determining upstream and downstream virtual network elements from the  
24 failure.

25                  7.     The method of claim 6, wherein correlating the failure comprises:  
26 correlating related failures from the upstream and downstream physical and  
27 virtual network elements with the failure.

- 1                    8.     The method of claim 1, wherein isolating the root cause of the failure  
2 comprises gathering performance data.
- 1                    9.     The method of claim 1, wherein isolating the root cause of the failure  
2 comprises performing tests on the video and data network.
- 1                    10.    The method of claim 9, wherein performing tests on the network  
2 comprises performing a physical connectivity test.
- 1                    11.    The method of claim 10, wherein the physical connectivity test  
2 comprises a Physical Loop Test.
- 1                    12.    The method of claim 9, wherein performing tests on the video and data  
2 network comprises performing a virtual connectivity test.
- 1                    13.    The method of claim 12, wherein the physical connectivity test  
2 comprises an Operations And Maintenance (OAM) test.
- 1                    14.    The method of claim 1, further comprising determining one or more  
2 user's affected by the failure.
- 1                    15.    The method of claim 14, wherein determining one or more user's  
2 affected by the failure comprises using customer data to correlate the one or more users to the  
3 root cause.
- 1                    16.    The method of claim 1, further comprising notifying the one or more  
2 user's affected by the root cause.
- 1                    17.    The method of claim 1, further comprising opening a repair ticket in  
2 one or more records of the one or more user's affected by the root cause.
- 1                    18.    The method of claim 17, further comprising determining when the root  
2 cause was resolved.
- 1                    19.    The method of claim 18, further comprising closing the repair ticket in  
2 the one or more records of the one or more user's affected by the root cause when the root  
3 cause has been resolved.

1                   20.     The method of claim 19, wherein notifying the one or more user's  
2     affected by the root cause when the root cause is resolved.

1                   21.     The method of claim 20, further comprising validating the resolution  
2     of the root cause.

1                   22.     The method of claim 21, wherein validating the resolution of the  
2     failure comprises testing a physical connectivity of the video and data network.

1                   23.     The method of claim 21, wherein validating the resolution of the  
2     failure comprises testing a virtual connectivity of the video and data network.

1                   24.     The method of claim 1, further comprising storing the root cause and  
2     failure in a history of failures.